

FIG. 1

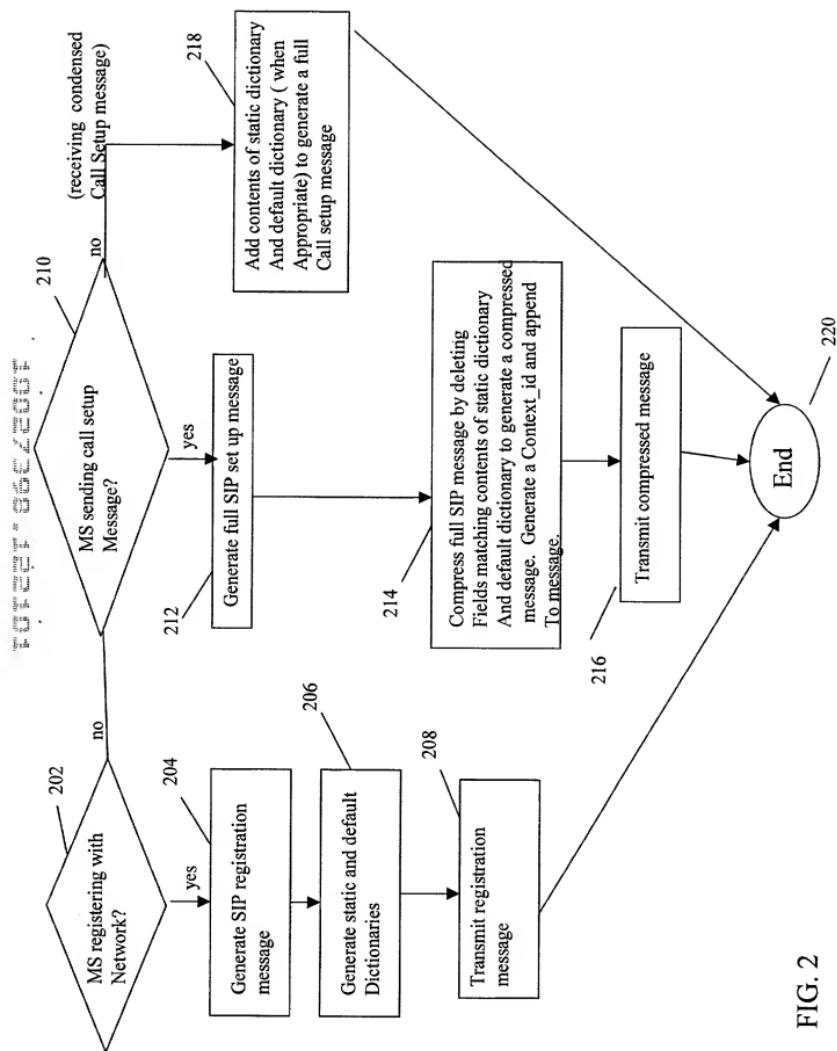


FIG. 2

REGISTER sip:ss1.wcom.com; SIP/2.0
Via: SIP/2.0/UDP ss1.wcom.com:5060
From: BigGuy <sip: 1-314-555-1111@ss1.wcom.com>
To: BigGuy <sip: 1-314-555-1111@ss1.wcom.com>
Call-ID: 123456789@ss1.wcom.com
Cseq: 1 REGISTER
Contact: BigGuy < sip:UserA@here.com >
Contact: sip:+1-314-555-1111@gw1.wcom.com
Authorization: Digest username ="UserB" realm ="MCI WorldCom SIP", nonce=.....
Content-Type: application/SDP
Content-Length: 132

FIG. 3

REGISTER message (Cont'd)

v = 0
o = UserA 2890844426 2890844426 IN IP4 ss1.wcom.com
s = Session SDP
c = IN IP4 100. 101. 102. 103
t = 0
m = audio 49170 RTP/AVP 0
a = rtpmap:0 PCMU/8000
a = rtpmap:0 16/4000
m = video 49183 RTP/AVP 98
a = rtpmap:98 L16/16000

FIG. 3a

Static Dictionary

- 1. First Line contents
- 2. Via: Contents
- 3. From: Contents
- 4. Content-Type: contents
- 5. Content-Length: contents
- 6. v = contents
- 7. o = contents
- 8. s = contents
- 9. c = contents
- 10. t = contents

Default Dictionary

Default Dictionary

- 1. Contact: (first contact address of the register message)
- 2. m= audio RTP/AVP 0
- 3. a= rtpmap: 0 PCMU/8000

FIG. 4

Static Dictionary

```
1. ss1.wcom.com; SIP/2.0
2. Via: SIP/2.0/UDP ss1.wcom.com:5060
3. From: BigGuy <sip:1.314.555-1111@ss1.wcom.com>
4. Content-Type: application/sdp
5. Content-Length: 132
6. v=0
7. o = UserA 289084426 289084426 IN IP4 ss1.wcom.com
8. s = Session SDP
9. c = IN IP4 100.101.102.104
10. t:= 0 0
```

Default Dictionary

```
1. Contact: BigGuy <sip:UserA@here.com>
2. m = audio ..... RTP/AVP 0
3. a = rtppmap: 0 PCMU/8000
```

FIG. 5

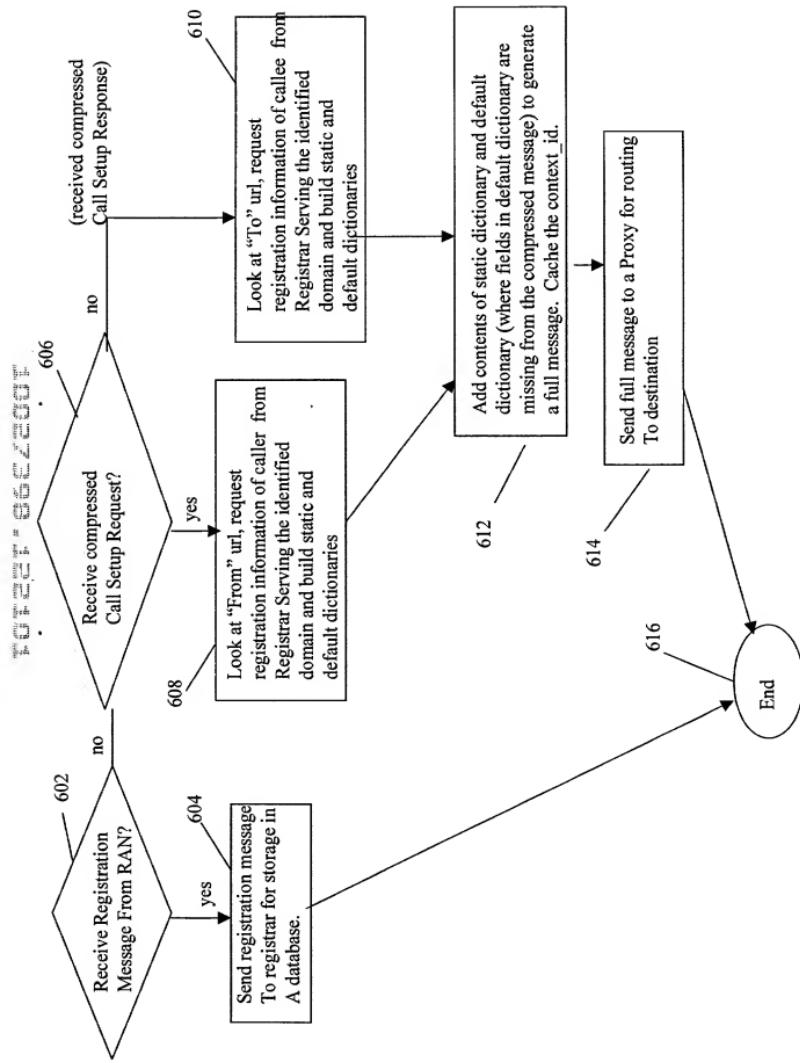


FIG. 6

INVITE sip:+1-972-555-2222@ss2.wcom.com; SIP/2.0
Via: SIP/2.0/UDP ss1.wcom.com :5060
From: BigGuy <sip:+1-314-555-1111@ss1.wcom.com;
To: LittleGuy <sip:+1-972-555-2222@ss2.wcom.com>
Call-ID: 12345600@ss1.wcom.com
Cseq: 1 INVITE
Contact: BigGuy <sip:UserA@here.com >
Authorization: <>*done during registration*>>
Content-type: application/sdp
Content-Length: 132
v=0
o = UserA 2890844426 2890844426 IN IP4 ss1.wcom.com
s = Session SDP
c = IN IP4 100.101.102.103
t = 0
m = audio 49172 RTP/AVP 0
a = rtpmap:0 PCMU/8000

FIG. 7

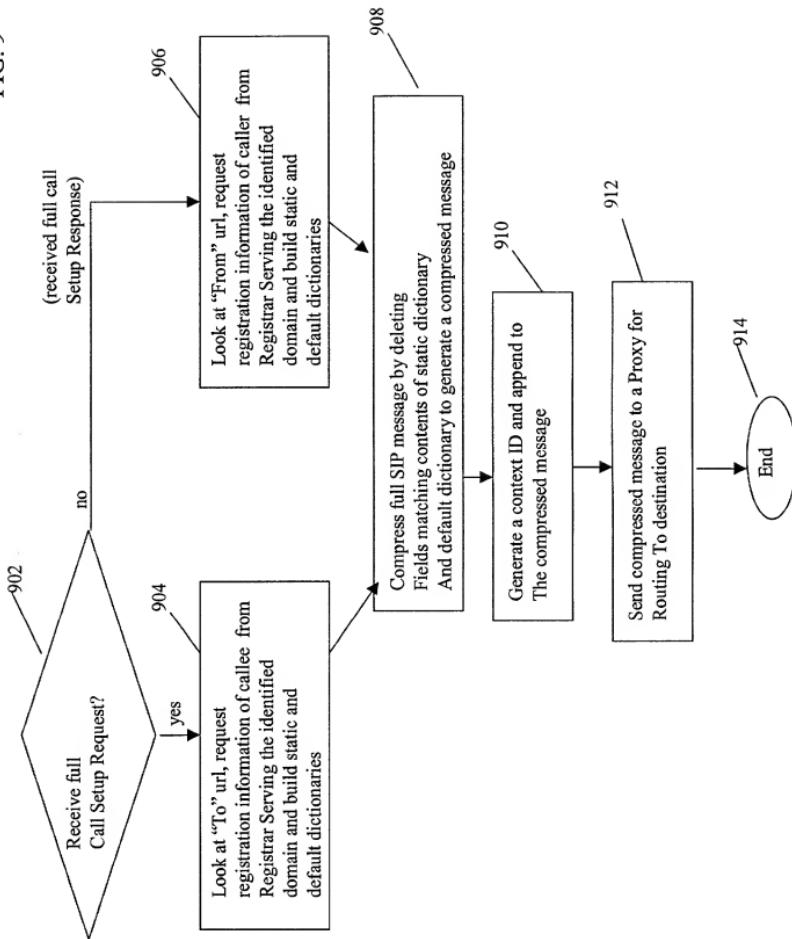
TELNET PORT = 8522

INVITE sip:+1-972-555-2222
ss1.wcom.com
LittleGuy ss2.wcom.com
12345600
1
49172
Context ID

FIG. 8

FIG. 9

FIGURE 9: Sequence Flowchart.



Request messages

1. INVITE
2. ACK
3. OPTIONS
4. BYE
5. CANCEL
6. REGISTER

Response messages

1. 100 TRYING
2. 180 RINGING
3.
4. 200 OK
5.
6. 302 Moved Temporarily
7.
8. 400 Bad Request
9.
10. 500 Internal Server Error

FIG. 10